

**Specifications**

Nominal Voltage		12 V
Capacity (25°C)	10HR(10.8V)	180 Ah
	5HR(10.5V)	157Ah
	1HR(9.60V)	112Ah
Dimension	Length	546 ± 3mm (21.50inch)
	Width	125 ± 2mm (4.92inch)
	Height	317 ± 2mm (12.48inch)
	Total Height	323 ± 2mm (12.72inch)
Approx. Weight		56kg (123.5lbs) ± 4%
Terminal type		T11
Internal resistance (Fully charged, 25°C)		Approx. 3.8m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 14.90V Temperature compensation: -30mV/°C
Maximum charging current		54A
Terminal material		Copper
Maximum discharge current		1300A(5 sec.)
Designed floating life(20°C)		15 years

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

**Constant Current Discharge Characteristics (A, 25°C)**

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	567	378	297.0	176	112	65.8	45.9	37.6	32.1	28.1	22.0	18.3	9.62
9.90V	550	367	289.9	173	110	65.4	45.6	37.4	31.9	27.9	21.9	18.3	9.60
10.2V	527	352	279.2	168	107	64.8	45.3	37.2	31.7	27.7	21.8	18.2	9.57
10.5V	505	336	269.7	164	105	63.8	45.0	36.9	31.5	27.5	21.6	18.1	9.52
10.8V	476	318	255.4	158	102	62.2	43.7	35.8	30.6	26.7	21.0	18.0	9.45

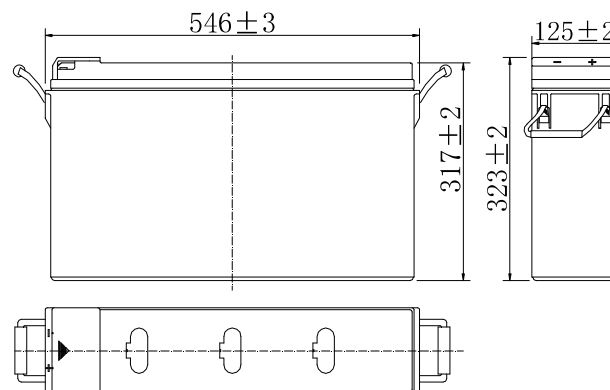
**Constant Power Discharge Characteristics (Watt, 25°C)**

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	5954	4082	3261	1979	1272	762	540	443	380	332	262	219	115
9.90V	5775	3960	3183	1940	1253	757	537	440	378	330	260	218	115
10.2V	5537	3797	3065	1880	1221	750	533	437	375	328	258	218	115
10.5V	5299	3633	2961	1835	1197	739	529	434	372	326	257	216	114
10.8V	5001	3429	2805	1767	1160	720	513	421	361	316	249	215	113

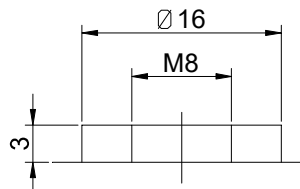
Note: The above characteristics data can be obtained within three charge/discharge cycles.



**Dimensions**

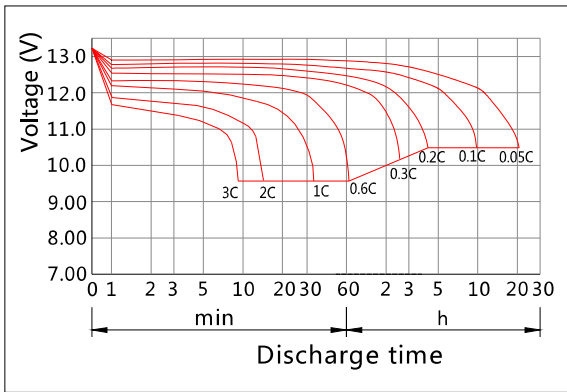


**Terminal**

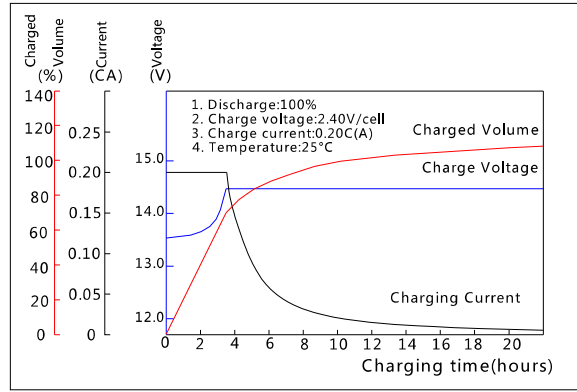


Terminal T11

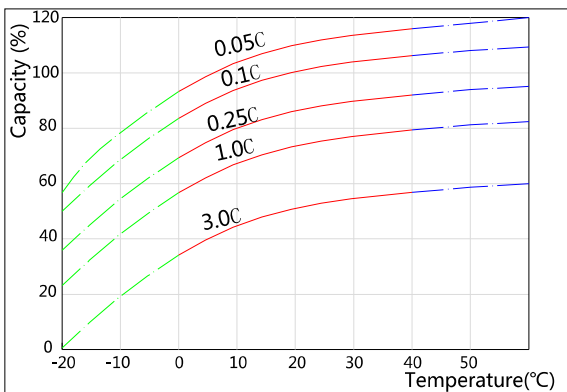
**Discharge Characteristics(25°C)**



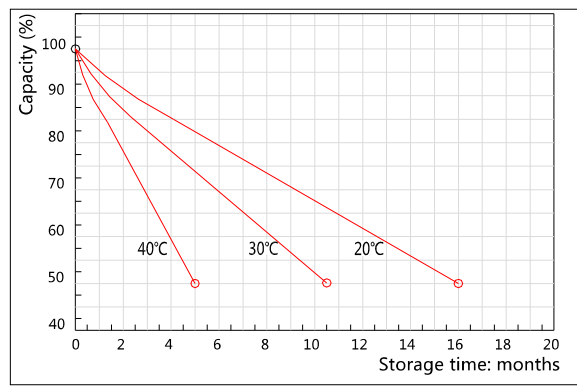
**Charging Characteristics(25°C)**



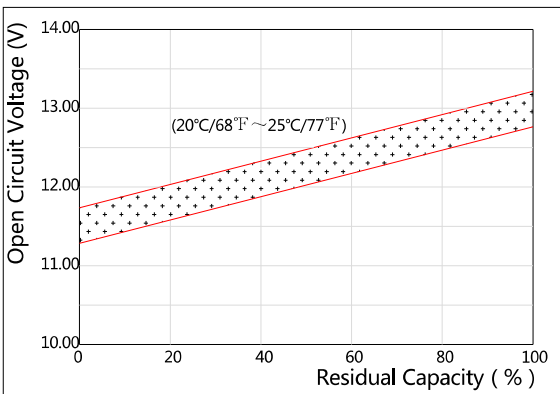
**Effect of Temperature on Capacity**



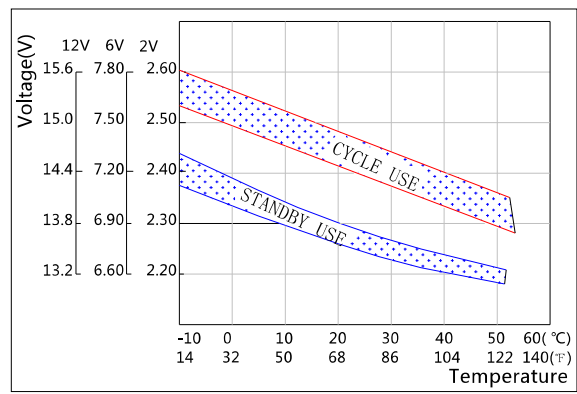
**Self-discharge Characteristics**



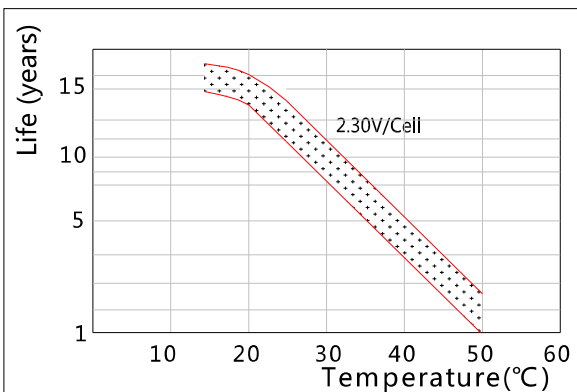
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



**The Relationship for Charging Voltage and Temperature**



**Floating Life on Temperature**



**Cycle Life on D.O.D(25°C)**

